

REMARKS

Reconsideration is respectfully requested.

In this response, new claims 113-117 have been added. Accordingly, claims 22, 31-34, 92-93, 100-117 are pending in the application for consideration. New claims find support, at least at page 11, lines 1-5 and Fig. 3 of the present specification.

Claims 22, 31, 33, 92-93 and 100-109 stand rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 1 of U.S. Patent No. 6,508,154 to Tripard (hereinafter "Tripard") in view of U.S. Patent No. 6,146,504 to Patadia, et al. (hereinafter "Patadia").

Claims 32 and 34 stand rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 17 and 4, respectively, of Tripard in view of Patadia.

Claim 111 stands rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 1 of Tripard.

Claims 110 and 112 stand rejected under 35 U.S.C. 101 as claiming the same invention as that of claim 1 of Tripard.

Claims 107-108 stand rejected under 35 U.S.C. 112, second paragraph, for indefiniteness.

Claims 110 stands rejected under 35 U.S.C. 102(e) as being anticipated by U.S. Patent No. 6,150,240 to Lee et al. (hereinafter "Lee").

Claims 22, 31-32 and 100-109 stand rejected to under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 5,005,814 to Gumbert (hereinafter "Gumbert") in view of Patadia and Applicant's Admitted Prior Art (AAPA).

Double Patenting

Regarding the provisional rejection of claims 22, 31, 33, 92-93, 100-109, claims 32, 34, and 111 based on the judicially created doctrine of obviousness-type double patenting, a Terminal Disclaimer is submitted herewith to overcome the rejection. Applicant respectfully requests withdrawal of the provisional obviousness-type double patenting rejection in the next office action.

Claims 110 and 112 stand rejected under 35 U.S.C. §101 over Claim 1 of Tripard. Applicant respectfully traverses this rejection in view of the following:

A reliable test for double patenting under 35 U.S.C. §101 is whether a claim in the application could be literally infringed without literally infringing a corresponding claim in the patent. *In re Vogel*, 422 F. 2d 438, 164 USPQ 619 (CCPA 1970). The question would be, is there an embodiment of the invention that falls within the scope of one claim, but not the other? If there is such an embodiment, then identical subject matter is not defined by both claims and statutory double patenting would not exist. *Vogel, supra*.

The scope of claim 110 and 112 and claim 1 of Tripard are different, and at least an embodiment of the claimed invention exists that falls within the scope of one claim, but not the other. Claim 112 depends from Claim 110 and is further distinguishable over claim 1 of Tripard. Accordingly, statutory double

patenting rejection of claims 110 and 112 is improper. Applicants respectfully urge withdrawal of statutory double patenting rejection of claims 110 and 112.

Rejections – 35 U.S.C. §112

Claims 107-108 were rejected under 35 U.S.C. §112, second paragraph, for indefiniteness. This rejection is respectfully traversed. Claim 22 recites a separator comprising a panel, and claims 107-108 recite how such a panel is affixed to the separator. Claiming further details as to how a panel is affixed to the separator does not make claims 107-108 indefinite. Support for these claim features may be found at least at page 10, lines 5-11 of the present specification. In view of the foregoing, Applicant submits that claims 107-108 are definite under 35 U.S.C. §112, second paragraph, and respectfully urges that the rejection of claims 107 and 108 be withdrawn.

Rejections – 35 U.S.C. §102

Claim 110 stands rejected under 35 U.S.C. §102(e) as being anticipated by Lee. This rejection is respectfully traversed.

It is well-established that in order to properly reject claims based on anticipation, the Examiner is required to make a *prima facie* showing that a single reference teach (i.e., identically describe) each and every element or step of the rejected claim.

Claim 110 recites an integrated circuit package separator for separating a plurality of integrated circuit packages from one another, the integrated circuit packages being provided as integrated circuit chip components joined to a board, the separating including cutting the board, the separator comprising a

panel having an uppermost surface and molded as part of the separator, a plurality of blocks formed as one piece with the panel and extending upward from the uppermost surface of the panel to support the board leaving the integrated circuit chip components extending between the blocks and panel, and a cutting mechanism configured to cut the board while the board is supported on the blocks and to thereby separate the integrated circuit packages from one another.

The Office Action asserts that “Lee discloses all the recited elements of the invention including a panel and a plurality of blocks formed as one piece with the panel (10) and a cutting mechanism (35).” Applicant respectfully disagrees.

As noted above, in order for an anticipation rejection to be sustained, Lee must identically describe each and every element of claim 110. Merely asserting that Lee discloses all the recited elements of claim 110 and citing panel 10 and cutting mechanism 35 does not satisfy the burden required to sustain anticipation. Claim 110 includes various other features apart from a panel and a cutting mechanism. In view of the foregoing, Applicant respectfully submits that the anticipation rejection of claim 110 is prima-facie defective. At least for this reason, rejection of claim 110 must be withdrawn, and a notice of allowance be communicated.

Claim 110 is patentably distinguishable over Lee further in view of the following additional reasons:

Lee discloses a fixture 10 to hold semiconductor devices. The fixture has grooves 14 and 18 to accommodate a saw blade 35. The saw makes a cut in two directions thereby separating the semiconductor devices. Bars 24 are placed across the semiconductor devices when sawing in the second direction to hold the semiconductor devices in the holding fixture. See Fig. 2 and the Abstract.

Lee fails to teach or suggest a plurality of blocks formed as one piece with the panel and extending upward from the uppermost surface of the panel to support the board leaving the integrated circuit chip components extending between the blocks and panel as recited in claim 110.

For example, Fig. 3 and col. 2, lines 35-38 of Lee disclose that “a ring or border is the portion of PCB 20 that is inserted into slots 13...PCB is then sawed in one direction and bars 24 are placed across each row of semiconductor devices 21 and sawing is done parallel to bars 24....” Thus, as the ring portion of PCB 20 is inserted into slots between the rectangular blocks, the semiconductor devices 21 must be located on a top surface of the rectangular blocks in order to effect sawing. Providing semiconductor devices in slots 13 teaches away from Lee and further destroys Lee’s intended functionality (i.e., inserting ring portion in the slots to effect sawing).

Accordingly, claim 110 is patentably distinct over Lee and is in condition for allowance.

Rejections – 35 U.S.C. §103

Claims 22, 31-32, and 100-109 stand rejected under 35 U.S.C. §103(a) as being anticipated by Gumbert in view of Patadia and further in view of AAPA. These rejections are respectfully traversed.

Claim 22 recites, in part, an integrated circuit package separator for separating a plurality of integrated circuit packages from one another, the integrated circuit packages being provided as integrated circuit chip components joined to a board, the separating including cutting the board, the separator comprising a panel, a plurality of blocks over the panel, the blocks having curved upper surfaces and being configured to support the board while leaving the integrated circuit chip components extending between the block upper surfaces and the panel.

The Office Action asserts that Gumbert “discloses the invention substantially as claimed including a panel 53, a plurality of blocks 29, and pins 5, 19....” However, Gumbert discloses a product carrier for circuit boards, the product carrier being used for a mounting operation of components – not cutting operation to separate integrated circuits. See the Abstract. Therefore, Gumbert fails to teach an integrated circuit package separator as recited in claim 22.

It is respectfully noted that MPEP §2143.03 indicates that “[t]o establish prima facie obviousness of a claimed invention, all the claim limitations must be taught or suggested by the prior art.” “All words in a claim must be considered in judging the

patentability of that claim against the prior art.” (see MPEP § 2143.03, rev. July 1998, p. 2100-114, emphasis added)

In Gumbert, pins 29 support circuit board 23. See Fig. 2 and col. 3, lines 18-20. Where does Gumbert show a plurality of blocks over the panel configured to support the board while leaving the integrated circuit chip components extending between the block upper surfaces and the panel. Support for such feature in claim 22 may be found in Fig. 3 and page 10, lines 1-18 of the present specification.

Having asserted that reference numeral (base plate) 53 as the panel and pins 29 as the rectangular blocks, how is it now possible to have integrated chip components extending between upper surfaces of pins 29 and base plate 53? As such, where are the integrated circuit components shown in Gumbert that extend between block upper surfaces and the panel as in claim 22? Furthermore, there would be no desirability to include such a feature in Gumbert as it does not relate to cutting or separating of integrated circuit packages.

The Office Action, on page 5, last paragraph, while acknowledging deficiencies of Gumbert asserts Patadia and AAPA as curing such deficiencies. In view of the above-noted deficiencies of Gumbert, even if the teachings of Patadia and AAPA are combined with Gumbert, all the limitations of claim 22 are not met.

It is respectfully submitted that “when a §103 rejection is based upon a modification of a reference that destroys the intent, purpose or function of the

invention disclosed in the reference, such a proposed modification is not proper and the prima facie case of obviousness cannot be made.” *In re Gordon*, 733 F. 2d 900 (Fed. Cir. 1984).

For example, in Gumbert, supporting pins 29 are provided to support circuit board 23, and that circuit board 23 is located in a flat condition. See col. 3, lines 20-22. Thus, if support pins 29 of Gumbert are modified to have a curved surface as suggested by the Examiner, such actions would make it difficult to support circuit board 23 in a flat condition as Gumbert intended. As such, col. 3, lines 16-18 of Gumbert disclose that the supporting pin 29 is located accurately at the lower face 35 of the circuit board, and there is no teaching or suggestion in Gumbert that pin 29 could be curved. Further, no desirability exists to perform such modification. Thus, to modify Gumbert as suggested by the Examiner would be against the teachings of Gumbert.

In view of the above, claim 22 is patentably distinct over the combination of Gumbert, Patadia and AAPA.

As claims 31-32, and 100-109 depend from claim 22, they too are allowable over the combination of Gumbert, Patadia and AAPA.

For example, claim 31 further recites pins extending upwardly from beneath the panel to beyond an upper surface of the panel, the pins configured to extend into the board and retain the board over the panel.

With regard to Gumbert, the Examiner asserted base plate 53 as the panel. Where does Gumbert show that pins 5 and 19 extend from beneath the base plate 53? See Gumbert's Figs. 2-3 which merely show pins 5 and 19 as

provided from above the base plate 53 – not underneath. It is thus clear from this demonstration, that the Examiner is using Applicant's specification as a roadmap and thus using hindsight reconstruction to reject the claimed invention. It is well-established by the courts that such actions are impermissible.

In view of the above, Applicant respectfully submits that claim 22 and claims 31-32, and 100-109 are in condition for allowance.

Claim 111 stands rejected as being unpatentable over Lee. Applicant demonstrated above that claim 110 is not anticipated by Lee. Claim 111 depends from claim 110 and further limits the scope of claim 110 in a patentable sense. As Lee fails to teach or suggest all the limitations of claim 110, claim 111 which depends from claim 110 is also patentably distinct over Lee. A notice to that effect is respectfully urged.

New claims 113, 114 include subject matter indicated to be allowable with regard to claim 10 of a co-pending Application having Serial No. 09/533,058, which application is pending with the same Examiner of this application. Accordingly, such claims are now in condition for allowance.

New independent claim 115 recites, in part, that integrated circuit components are provided on an underside of the board in slots that extend between upper surface of ribs and the panel. See, for example, Figure 3 where slots are effectively formed between the plurality of ribs 140, 142, 144. Such a feature is neither taught nor suggest by the prior art of record. Accordingly, claim 113 is allowable for the above noted reason in addition to

the reasons indicated as above with regard to claims 22 and 110. As claims 116 and 117 depend from claim 115, they too are allowable.

This application is believed to be in immediate condition for allowance and action to that end is requested.

The Examiner is requested to phone the undersigned in the event that the next Office Action is one other than a Notice of Allowance. The undersigned is available for telephone consultation at any time.

Respectfully submitted,

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